

# REPORT ON BOILERS.

No. 51841

7 OCT 1931

Date of writing Report 6/1 1932 When handed in at Local Office 6-10-31 Port of Glasgow  
 No. in Survey held at Annan & Nakskov Date, First Survey 22-6-31 Last Survey 6-10-1931  
 Reg. Book. 40/65 on the BOILER No 12160. 1 1/4" ERRIA (Number of Visits 6) Gross 8636.20  
 Master ✓ Built at Nakskov By whom built 1/4 Nakskov Skibsværkt. When built 1931 Tons 5480.93  
 Boilers made at Annan By whom made Cochran & Co Annan Ltd When made 1931  
 Owners 1/4 D. & A. Skovgaard Port belonging to Copenhagen

**VERTICAL DONKEY BOILER**— No. one Description Cochran Vertical Manufacturers of steel  
 Made at — By whom made — When made — Where fixed on a platform in the engine room Working pressure 120  
 tested by hydraulic pressure to 230 Date of test 6-10-31 No. of Certificate 19034 Fire grate area none Description of safety valves Enclosed spring  
 No. of safety valves 2 Area of each 4.9 sq ft Pressure to which they are adjusted 120 lbs If fitted with easing gear yes If steam from main boilers can enter the donkey boiler no main boiler  
 Diameter of donkey boiler 7'-0" Length 18'-0" Material of shell plates steel Thickness 3/4"  
 Range of tensile strength 28-32 tons Description of riveting long. seams Lap WR & DBS DR Diameter of rivet holes 1 1/8" & 3 1/32" Whether punched or drilled drilled Pitch of rivets 3-4 1/2" 3-3 1/2" & 3-5 1/2" Lap of plating 5 1/2" & 5" Per centage of strength of joint 72-36 1/2 Working pressure of shell by rules 193 & 164 Thickness of shell crown plates 3 1/2" Radius of do. 3'-6" No. of stays to do. — Diameter of stays — Diameter of rules 193 & 164  
 furnace—Top — Bottom 6'-0" Length of furnace — Thickness of furnace side plates 3 1/2" Description of joint seamless Working pressure of furnace by rules 153 Thickness of Ogee ring 1" Working pressure of Ogee ring by rules 133 Thickness of furnace crown plates 3 1/2" Radius of do. 3'-0" Stayed by hemisphere Diameter of uptake 15" x 23" Thickness of uptake plates 9/16" Thickness of tube plates front 1 1/8" back 1 1/8" Mean pitch of stay tubes in nest 16-7 1/2" & 8-1" Pitch in outer vertical rows 8" & 4-7 1/2"  
 Diameter of tube holes FRONT 2 1/4" & 1 1/2" BACK 2 3/4" & 1 1/2" Working pressure of tube plates by rules F147 & 144 Tubes: Material 1 1/2" Dia stay tubes of mild steel all other tubes of all other materials  
 External diameter stay 2 1/4" & 1 1/2" plain 2 1/4" & 1 1/2" Thickness stay 3/16" plain 1/16" No. of threads per inch 9 Pitch of tubes 33/4 x 4 & 2-28 x 2-36  
 Working pressure by rules 125 Manhole compensation; Size of opening in shell plate 16" x 12" Section of compensating ring 6" x 7/8" No. of rivets and diameter of rivet holes 36 - 3/32" Outer row pitch at ends 3-9 1/2"

**FOR COCHRAN & CO., ANNAN, LTD.**  
 The foregoing is a correct description,

E. K. E. Manufacturer.  
**GENERAL WORKS MANAGER.**

Dates of Survey while building { During progress of work in shops - 1931 June. 22-26 July 9 Aug. 21 Sep 10 Oct 5 Drawing No. E.28514.  
 { During erection on board vessel - 30/10-2/11-17/11-30/11-18/12-19/12-29/12-30/12 1931.  
 Total No. of visits 6 + 8 = 14. Is the approved plan of boiler forwarded herewith ✓

## GENERAL REMARKS

(State quality of workmanship, opinions as to class, &c.)

This boiler has been built under Survey in accordance with the rules and approved plan. The workmanship and materials are good. It has been built to the order of Messrs. Nakskov Skibsværkt, Nakskov. for vessel 2° 50 building for the East Asiatic Co. The boiler has been fitted on board the vessel under my supervision and to my satisfaction. The arrangement is such that the boiler may be fired either by oil fuel or by exhaust gas from the shipboard main engine or by both means simultaneously. After completion the boiler was examined and tested under working conditions and found satisfactory and the safety valves were adjusted under steam to 120 lbs. 10". An EUREKA pump, 135 x 90 x 125 mm diameter, and an injector are fitted for feeding purposes. Recommend the vessel to have notation of D.B. 120 LBS. in the Register Book.

Survey Fee. ... £ 4 : 4 : 9  
 Travelling Expenses (if any) £ : : }

When applied for. ... 19...  
 When received. ... 19...

**MONTHLY ACCOUNT**

E. K. E.  
**SURVEYOR TO LLOYD'S REGISTER OF SHIPPING**  
A. Campbell  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 6 - OCT 1931**  
 Assigned **TRANSMIT TO LONDON**

TUE, 26 JAN 1932

Lloyd's Register Foundation

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